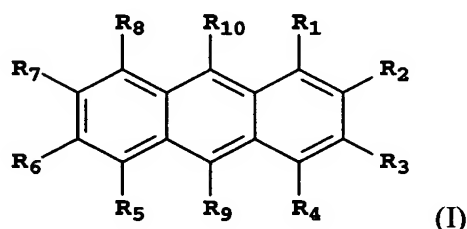


**CLAIMS:**

1. A white light-emitting OLED device including spaced anode and cathode, and having blue light-emitting and yellow, orange, or red light-emitting layers, the blue light-emitting layer including
- a) a monoanthracene derivative of Formula (I) as a host material



wherein:

- R<sub>1</sub>-R<sub>8</sub> are H;  
R<sub>9</sub> is not the same as R<sub>10</sub>;  
R<sub>9</sub> is a naphthyl group having no fused rings with aliphatic carbon ring members; and  
R<sub>10</sub> is a biphenyl group having no fused rings with aliphatic carbon ring members; and  
provided that R<sub>9</sub> and R<sub>10</sub> are free of amines and sulfur compounds.

2. The white light-emitting OLED device of claim 1 further including:
- b) a blue light-emitting dopant, wherein the blue-emitting dopant is from 0.25 to 5% by volume of the host material.
3. The white light-emitting OLED device of claim 2 wherein the blue light-emitting dopant includes a tertiary aromatic amine.

4. The device of claim 1 wherein R<sub>9</sub> is a naphthyl group of two fused rings.
5. The device of claim 4 wherein R<sub>9</sub> is an unsubstituted naphthyl group.
6. The device of claim 1 wherein the naphthyl group contains a further fused ring.
7. The device of claim 1 wherein the naphthyl group contains two or more further fused rings.
8. The device of claim 1 wherein the naphthyl group is substituted with at least one substituent selected from fluorine, hydroxy, cyano, alkyl, alkoxy, aryloxy, aryl, carboxy, trimethylsilyl, and heterocyclic oxy groups.
9. The device of claim 1 wherein R<sub>9</sub> is a 2-naphthyl group.
10. The device of claim 1 wherein R<sub>10</sub> is an unsubstituted biphenyl group.
11. The device of claim 1 wherein at least one of the phenyl rings has a ring fused thereto.
12. The device of claim 1 wherein the biphenyl is substituted with another phenyl ring without fused rings to form a terphenyl ring system.
13. The device of claim 10 wherein the biphenyl is a 2-biphenyl.

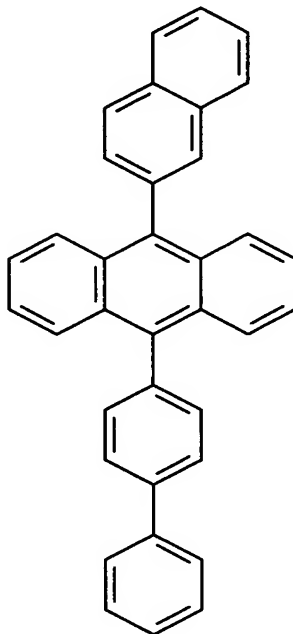
14. The device of claim 10 wherein the biphenyl is a 3-biphenyl.

5 15. The device of claim 10 wherein the biphenyl is a 4-biphenyl.

16. The device of claim 12 wherein the rings are unsubstituted.

10 17. The device of claim 1 wherein the biphenyl is substituted with at least one substituent selected from fluorine, hydroxy, cyano, and alkyl, alkoxy, aryloxy, aryl, carboxy, trimethylsilyl, and heterocyclic oxy groups.

18. The device of claim 1 wherein Formula (I) is



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19. The device of claim 1 including a co-host.

20. The device of claim 19 including a polymeric co-host.

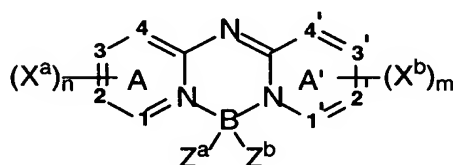
21. The device of claim 19 including an oxinoid compound.

22. A display incorporating the device of claim 1.

5 23. An area lighting system incorporating the device of claim 1.

24. The device of claim 2 wherein the blue light-emitting dopant includes

i) a compound of the structure



10 wherein:

A and A' represent independent azine ring systems corresponding to 6-membered aromatic ring systems containing at least one nitrogen;

(X<sup>a</sup>)<sub>n</sub> and (X<sup>b</sup>)<sub>m</sub> represent one or more independently selected substituents  
15 and include acyclic substituents or are joined to form a ring fused to A or A';

m and n are independently 0 to 4;

Z<sup>a</sup> and Z<sup>b</sup> are independently selected substituents;

1, 2, 3, 4, 1', 2', 3', and 4' are independently selected as either carbon or  
nitrogen atoms; and

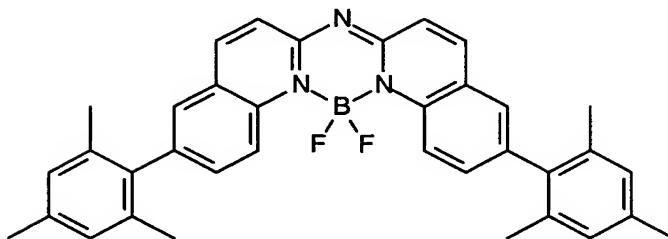
20 provided that X<sup>a</sup>, X<sup>b</sup>, Z<sup>a</sup>, and Z<sup>b</sup>, 1, 2, 3, 4, 1', 2', 3', and 4' are selected to provide blue luminescence;

ii) a blue-emitting derivative of a distyrylbenzene or a distyrylbiphenyl; or

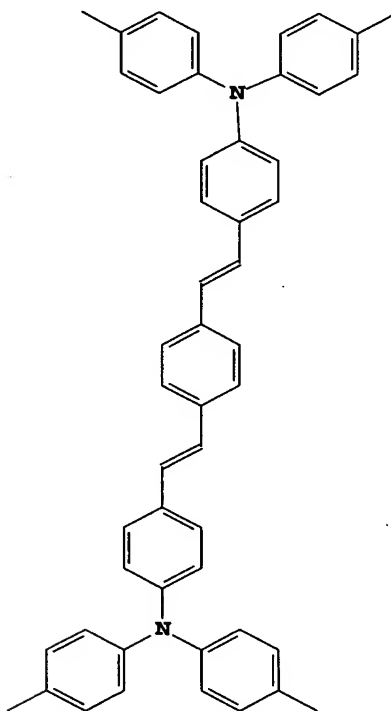
iii) perylene or a derivative of perylene.

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25. The device of claim 24 wherein i) includes

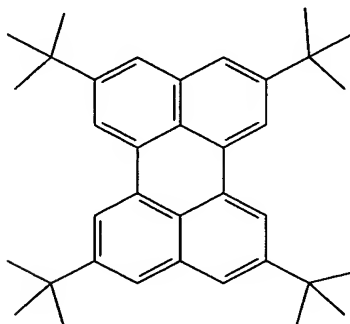


26. The device of claim 24 wherein ii) includes



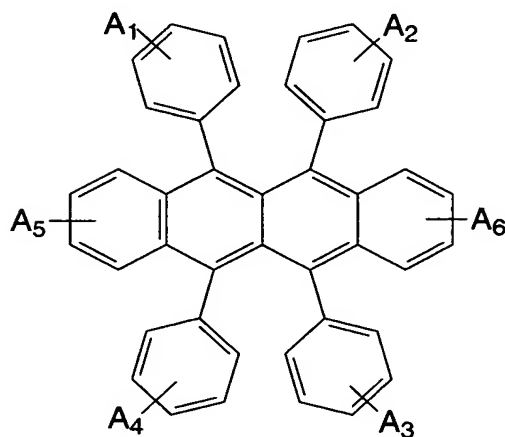
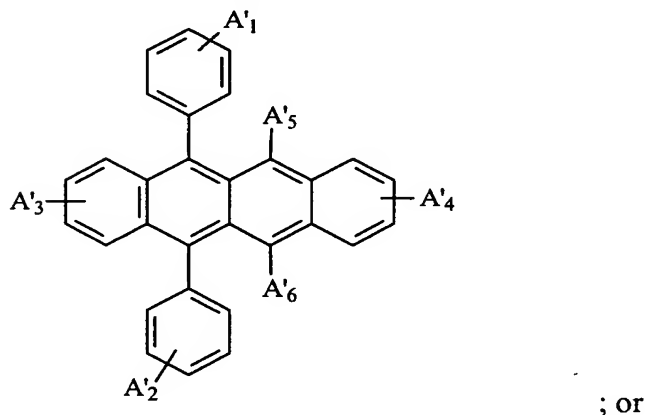
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27. The device of claim 24 wherein iii) includes



28. The device of claim 1 wherein the yellow, orange, or red light-emitting layer includes:

i) a compound of the following structure:



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wherein A<sub>1</sub>-A<sub>6</sub> represent one or more substituents on each ring and where each substituent is individually selected from one of the following:

Category 1: hydrogen, or alkyl of from 1 to 24 carbon atoms;

Category 2: aryl or substituted aryl of from 5 to 20 carbon atoms;

10 Category 3: hydrocarbon containing 4 to 24 carbon atoms, completing a fused aromatic ring or ring system;

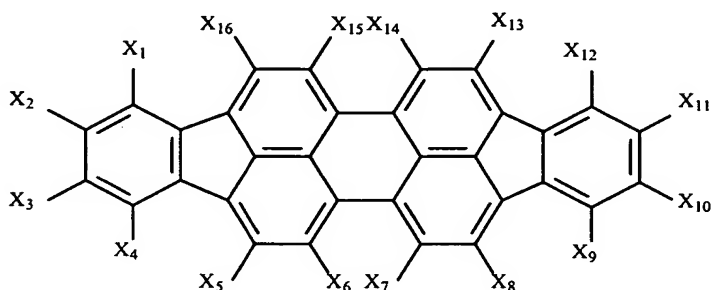
Category 4: heteroaryl or substituted heteroaryl of from 5 to 24 carbon atoms such as thiazolyl, furyl, thienyl, pyridyl, quinolinyl or other heterocyclic systems, which are bonded via a single bond, or complete a fused heteroaromatic  
15 ring system;

Category 5: alkoxylamino, alkylamino, or arylamino of from 1 to 24 carbon atoms; or

Category 6: fluoro, chloro, bromo or cyano;

ii) a diindenoperylene compound of the following

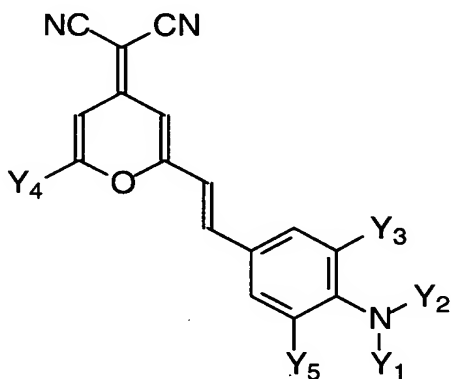
5 structure:



wherein:

X<sub>1</sub>-X<sub>16</sub> are independently selected as hydro or substituents that provide red, yellow, or orange luminescence; or

10 iii) a compound of the following structure:



wherein:

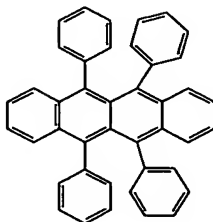
Y<sub>1</sub>-Y<sub>5</sub> represent one or more groups independently selected from: hydro, alkyl, substituted alkyl, aryl, or substituted aryl;

15 Y<sub>1</sub>-Y<sub>5</sub> independently include acyclic groups or are joined pairwise to form one or more fused rings; provided that Y<sub>3</sub> and Y<sub>5</sub> do not together form a fused ring; or

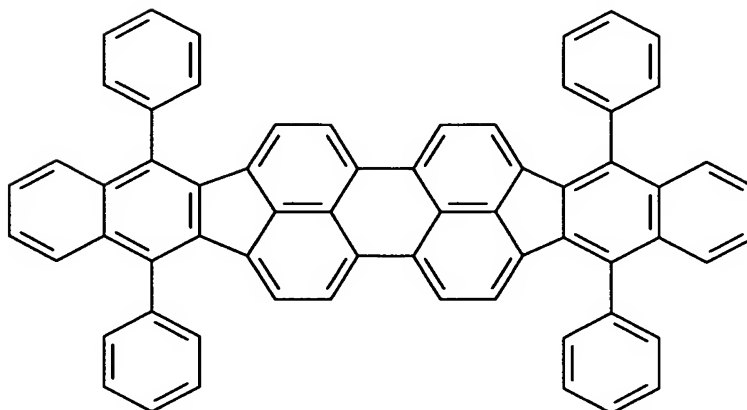
any combination of i), ii), and iii).

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29. The device of claim 28 wherein i) includes

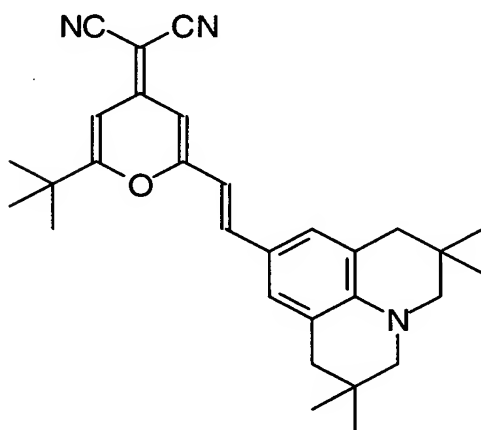


30. The device of claim 28 wherein ii) includes



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31. The device of claim 28 wherein iii) includes



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32. The device of claim 1 including a color filter array including at least three separate filters having bandpass spectra for passing red,



green, and blue light, respectively, in response to white light to produce preselected color outputs.

33. The device of claim 32 wherein the bandpass spectrum of  
5 the red color filter is from 605 nm to 700 nm.

34. The device of claim 32 wherein the bandpass spectrum of the green color filter is from 495 nm to 555 nm.

10 35. The OLED device of claim 32 wherein the bandpass spectrum of the blue color filter is from 435 nm to 480 nm.